

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

|   |   |                      |
|---|---|----------------------|
| In the Matter of  | ) |                      |
|   | ) |                      |
| Connect America Fund  | ) | WC Docket No. 10-90  |
|   | ) |                      |
| A National Broadband Plan for Our Future                              | ) | GN Docket No. 09-51  |
|   | ) |                      |
| Establishing Just and Reasonable Rates for<br>Local Exchange Carriers | ) | WC Docket No. 07-135 |
|   | ) |                      |
| High-Cost Universal Service Support                                   | ) | WC Docket No. 05-337 |
|   | ) |                      |
| Developing an Unified Intercarrier<br>Compensation Regime             | ) | CC Docket No. 01-92  |
|   | ) |                      |
| Federal-State Joint Board on Universal<br>Service                     | ) | CC Docket No. 96-45  |
|   | ) |                      |
| Lifeline and Link-Up  | ) | WC Docket No. 03-109 |
|   | ) |                      |
| Universal Service Reform – Mobility Fund                              | ) | WT Docket No. 10-208 |

To: Chief, Wireline Competition Bureau

**OPPOSITION OF INVENTIVE WIRELESS OF NEBRASKA, LLC  
TO PETITION FOR WAIVER**

Inventive Wireless of Nebraska, LLC dba Vistabeam (“Vistabeam”), by counsel and pursuant to Sections 1.409 and 1.415 of the Commission’s Rules, hereby opposes the Petition for Waiver (“Petition”) filed on June 26, 2012 by CenturyLink.<sup>1</sup> CenturyLink claims that because Vistabeam imposes a 20 GB data cap for its least expensive tier of service, certain undefined areas it covers should be re-designated as “unserved” so CenturyLink can obtain more than

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<sup>1</sup> See *Public Notice*, “Wireline Competition Bureau Seeks Comment on CenturyLink Petition for Waiver of Certain High-Cost Universal Service Rules,” DA 12-1007, rel. June 27, 2012 (“*Public Notice*”). The *Public Notice* established a July 12, 2012 deadline for the filing of responsive pleadings. Accordingly, this Opposition is timely filed.

\$140,000 in Connect America Fund (“CAF”) Phase I funding. Because CenturyLink’s argument rests on an arbitrary standard it devised to suit its needs, there is no legal basis for it. The Petition thus should be dismissed or denied.

### **Introduction<sup>2</sup>**

Vistabeam is a fixed wireless broadband provider that services nearly 3,000 subscribers in Colorado, Nebraska and Wyoming. Vistabeam uses unlicensed spectrum in the 900 MHz, 2.4 GHz and 5 GHz bands and “lightly licensed” spectrum in the 3650-3700 MHz band. The Vistabeam network covers nearly 40,000 square miles with a system composed of microwave and fiber backhauls and fixed wireless links to end users. Vistabeam does not rely on federal subsidies to service its customers – it is an unsubsidized competitor that delivers high quality broadband services in some of the most rural areas of the continental United States.

CenturyLink is the incumbent local exchange carrier (“ILEC”) in the majority of Vistabeam’s service area. CenturyLink’s motivation to serve these areas is fueled by its desire to receive additional funding from the federal government. In Vistabeam’s experience, CenturyLink has chosen to NOT serve areas with broadband unless it receives additional subsidies to deliver that service. This has create a market opportunity for companies like Vistabeam that have shown initiative, entrepreneurial skill and commitment to local communities by deploying fixed wireless broadband that meets or exceeds the services that CenturyLink provides. If CenturyLink is allowed to obtain CAF Phase I funding to deploy broadband in the areas in question, Vistabeam would suffer undue harm from government sponsored competition.

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<sup>2</sup> Attached hereto as Exhibit 1 is the Declaration of Matthew Larsen, Vistabeam’s Manager, which certifies the truth of the factual statements presented herein. Mr. Larsen is also a co-founder and a long-time member of the Board of Directors of the Wireless Internet Service Providers Association (“WISPA”).

Federal funds should not be used for competitive broadband. Federal funding should only be used for the deployment of broadband in truly unserved areas.

### **Discussion**

#### **I. THE COMMISSION HAS ALREADY REJECTED REQUESTS TO ENTERTAIN INDIVIDUAL CHALLENGES BASED ON BROADBAND PERFORMANCE.**

CenturyLink claims that there are 182 living units within Vistabeam's coverage that should be re-designated as "unserved."<sup>3</sup> As the sole basis for this allegation, CenturyLink asserts that Vistabeam has established a data cap of 20 GB per month, which is less than the 25 GB monthly cap that satellite provider WildBlue uses.<sup>4</sup> According to CenturyLink, Vistabeam's service "exhibits the characteristics that led the Commission to disregard satellite broadband service for purposes of deciding which areas are 'unserved' under CAF Phase I."<sup>5</sup>

CenturyLink's Petition is legally defective and should be dismissed or denied. For purposes of determining areas where Phase I support may be provided, the Commission relies on its definition of "broadband" adopted in the *USF/ICC Transformation Order* – speed of at least 4 Mbps/1 Mbps to "provide subscribers in rural and high cost areas with the ability to use critical broadband applications in a manner reasonably comparable to broadband subscribers in urban areas."<sup>6</sup> The Commission expressly declined to adopt specific capacity or other performance

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<sup>3</sup> See Petition at Exhibit B.

<sup>4</sup> See Petition at Exhibit A, p.5.

<sup>5</sup> Petition at 7.

<sup>6</sup> *Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing an Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up; and Universal Service Reform – Mobility Fund*, Report and Order and Further Notice of Proposed Rulemaking, FCC 11-161 (rel. Nov. 18, 2011) ("*USF/ICC Transformation Order*"), at ¶ 94.

metrics, even for CAF Phase I recipients,<sup>7</sup> and adopted a one-time fixed payment of \$775 per location rather than adopting a detailed economic cost model.<sup>8</sup>

In the *Second Order on Reconsideration*, the Commission flatly rejected CenturyLink's efforts to impose additional service quality standards on WISPs "for several reasons."<sup>9</sup>

We acknowledge that some consumers may live in areas ineligible for CAF Phase I support even though the broadband available to them does not currently meet our goals. The Commission chose in CAF Phase I, however, to focus limited resources on deployments to extend broadband to some of the millions of unserved Americans who lack access to broadband entirely, rather than to drive faster speeds to those who already have service. We are not persuaded that the decision about the more pressing need was unreasonable. Moreover, we are not persuaded that permitting CAF Phase I recipients to overbuild other broadband providers represents the most efficient use of limited CAF Phase I support. *In addition, we conclude that we do not have an adequate record at this time to make a determination about how high a competitor's price must be—either alone or in combination with usage limits—before we would support overbuilding that competitor, a critical component of petitioners' request.*<sup>10</sup>

Clearly, for purposes of CAF Phase I, the Commission has no interest in upsetting the simple standards it adopted to expedite support to CenturyLink and other price cap carriers.

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<sup>7</sup> See *id.* at ¶ 98.

<sup>8</sup> This is the subject of a separate Commission proceeding for CAF Phase II. See *Public Notice*, "Wireline Competition Bureau Seeks Comment on Modeling Design and Data Inputs for Phase II of the Connect America Fund," WC Docket Nos. 10-90, 05-337, Report No. DA 12-911, rel. June 8, 2012.

<sup>9</sup> *In the Matter of the Connect America Fund, A National Broadband Plan for Our future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing an Unified Intercarrier Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and Link-Up, Universal Service – Mobility Fund*, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 07-135, WC Docket No. 05-337, CC Docket No. 01-92, CC Docket No. 96-45, WC Docket No. 03-109, WT Docket No. 10-208, Second Order on Reconsideration, FCC 12-47, rel. Apr. 25 ("Second Order on Reconsideration"), at ¶ 15. This argument was presented in ITTA Petition and in CenturyLink's ex parte presentation. See letter from Melissa E. Newman to Marlene H. Dortch, FCC Secretary, WC Docket No. 10-90, *et al.*, dated Apr. 23, 2012.

<sup>10</sup> *Second Order on Reconsideration* at ¶ 15 (footnote omitted) (emphasis added).

## **II. CENTURYLINK'S FACTUAL ALLEGATIONS ARE UNTRUE AND ITS ASSUMPTIONS ARE FLAWED.**

CenturyLink goes to great length in its attempt to discredit the technical capabilities of fixed wireless networks and lump them in with satellite broadband providers. Although these arguments should not be considered in light of the Commission's reasoned decision to reject service parameters, Vistabeam shows that these claims are false and easily refuted.

### **A. WISP Operations Are Not Constrained By Capacity.**

CenturyLink claims that WISPs have substantial capacity constraints.<sup>11</sup> In comparison to non-fiber wireline distribution systems and satellite broadband systems, WISPs can actually deploy far more capacity at a lower price. For a WISP, a tower is not restricted to a single access point. Each tower can be the home to many access points in multiple frequencies and scaled right up to the limit of the available spectrum at that location. As customer utilization increases, WISPs can easily add more capacity to a tower and share the load among multiple access points. The cost for Vistabeam to add a new sector to an existing tower with the capacity to serve an additional 50 customers is less than \$1,000 – including the labor to install the equipment. While WISPs do operate in unlicensed spectrum, between the 900 MHz, 2.4 GHz and 5 GHz unlicensed allocations, there are hundreds of megahertz of unlicensed spectrum that is available for use at any given location.

In direct contradiction to CenturyLink's argument, there is typically more unused unlicensed spectrum in rural areas and there are plenty of physical structures for antennas and backhaul devices. Vistabeam operates in an extremely rural area, and has found enough places to put up backhauls and open spectrum to build over 2,000 miles of microwave backhaul,

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<sup>11</sup> See Petition at 8-9.

completely bypassing CenturyLink's antiquated and overpriced special access network. The availability of unlicensed spectrum and low-cost backhaul equipment has also enabled Vistabeam to build in a substantial amount of redundancy, with several large wireless rings and cross connections that are able to route around problem areas. By contrast, CenturyLink still has many areas in the Vistabeam service area that experience long disruptions after line cuts because its wireline network does not have the same level of redundancy as the Vistabeam fixed wireless network.<sup>12</sup>

**B. WISP Operations Are Not Constrained By Line-of-Sight.**

CenturyLink's claim that WISPs suffer from line-of-sight coverage limitations is also untrue.<sup>13</sup> Many WISPs utilize the 900 MHz unlicensed spectrum which propagates through trees and around some terrestrial obstructions. With the imminent availability of TV white space spectrum for WISP use, there will be even more spectrum options available that will overcome line-of-sight limitations.

When considering network limitations, it is important to understand the inherent shortcomings of CenturyLink's antiquated wireline network. The CenturyLink copper network, especially in more rural areas, is very large and difficult to maintain and upgrade. In many of the places where Vistabeam is offering 12 Mbps services, the CenturyLink DSL network is unable to offer speeds higher than 512 Kbps. Many CenturyLink remote DSLAMs ("Digital Subscriber Line Access Modules") in rural areas are fed by a single T1 line that is only capable of 1.5 Mbps, substantially limiting the total throughput to customers served by these DSLAMs. The typical WISP tower is supplied by a high-speed microwave system that can deliver 30-40 Mbps speeds and can be upgraded to licensed radios that deliver up to 4.4 Gbps speeds. This

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<sup>12</sup> For a recent example, see <http://kneb.com/index.php?more=dgxx9exi>.

<sup>13</sup> See Petition at 10-11.

means that WISP customers will get much higher throughput at peak utilization times than DSL customers. Finally, WISPs are not limited by the coverage area of a wireline plant. WISPs can easily service customers in new construction areas or in places with poor quality wireline networks without having to undergo substantial plant upgrades.

Vistabeam utilizes nearly all of the unlicensed spectrum allocations that are available, and delivers speeds of up to 12 Mbps to residential customers in the majority of its service area and speeds of up to 25 Mbps to business customers. This meets or exceeds the speeds offered by CenturyLink in the areas in question. This is a clear demonstration that Vistabeam is meeting the needs of customers in these areas and that the positions CenturyLink has taken in its Petition are unsupportable.

**C. Vistabeam Does Not Impose Restrictive Data Caps.**

CenturyLink makes the claim that broadband service from many WISPs comes encumbered with restrictive data caps, saying that a 20 GB monthly cap is too restrictive.<sup>14</sup> Vistabeam apparently is listed on Exhibit B to the Petition because it has a 20 GB monthly cap listed for one of its service plans. What was not apparent from CenturyLink's Petition is that Vistabeam actually offers several different service plans and the 20 GB monthly cap only applies to one plan.

For purposes of the Petition, CenturyLink established 25 GB per month as the baseline for a data cap. Vistabeam collected network statistics over a period of three months before establishing its caps and determining pricing. Typically less than 0.5% of Vistabeam customers meet or exceed their bandwidth cap each month, a significant point that CenturyLink fails to present.

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<sup>14</sup> See *id.* at 14-15.

The Vistabeam bandwidth caps for residential customer go as high as 80 GB per month and commercial accounts are available that do not have any monthly cap restrictions.

Customers are also provided with several notices when they exceed their caps, and have access to an online tool that lets them see their usage. Vistabeam users who exceed the cap are typically given a “free pass” on their first overage and have the opportunity to upgrade to a faster plan with a higher data cap at no extra charge. When a customer does exceed the data cap on a regular basis, the overage cost is \$1 per GB over the limit – the customer is not cut off from Internet access. This is a fraction of the cost of other wireless providers such as Verizon, which charges \$10 per GB for data cap overages. Vistabeam also does not severely slow, restrict, and/or suspend service to customers like satellite providers such as ViaSat do for their Exede broadband service.

Finally, it should be noted that Vistabeam offers broadband service without forcing customers to take on additional “bundled” services in order to get the best price. A trip through the CenturyLink website to obtain pricing for the Vistabeam main office resulted in a total charge of \$76.79 (not including taxes surcharges and other fees, typically another 20%) to get a 1.5 Mbps DSL line and a phone line, with the Internet component being priced at \$33.44. There is no option on the CenturyLink website to order DSL without also getting a phone line, which may explain why so many customers do bundles. In comparison, Vistabeam offers a 4 Mbps connection for \$49.95 and VoIP phone line for \$19.95 for a total of \$69.95.

In sum, the conjecture and innuendo in CenturyLink’s Petition cannot stand up to the facts. As the Petition and the Opposition make clear, the Commission should not take CenturyLink at its word, and should not engage in line-drawing to supersede the National Broadband Map.



### **Conclusion**

CenturyLink's Petition ignores the Commission's mandate and is predicated on speculation. The Commission should dismiss or deny CenturyLink's Petition with respect to Vistabeam.

Respectfully submitted,

**INVENTIVE WIRELESS OF NEBRASKA,  
LLC dba VISTABEAM**

Date: July 12, 2012

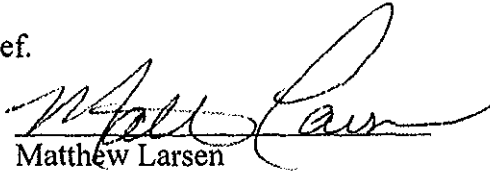
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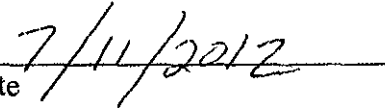
*Its Attorneys*

## **Exhibit 1**

### **Declaration of Matthew Larsen**

My name is Matthew Larsen, and I am the Manager of Inventive Wireless of Nebraska, LLC dba Vistabeam ("Vistabeam"). I am making this Declaration in support of Vistabeam's Opposition to a Petition for Waiver filed on June 26, 2012 by CenturyLink. I have read Vistabeam's Opposition. I hereby certify under penalty of perjury that the statements of fact contained in the Opposition are true and correct to the best of my knowledge, information and belief.

  
Matthew Larsen

  
Date